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EXAMINER	
PATEL, JAY P	

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2666	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/866,162	MCWILLIAMS, PATRICK	
	Examiner	Art Unit	
	Jay P. Patel	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,13-15,17,19,28,31-33,35 and 43-46* is/are rejected.

7)☒ Claim(s) *12, 18, 20-27, 29-30, 34, 36-42 and 43-46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 3, 7, 13-14, and 28 are objected to because of the following informalities:

In regards to claim 1, the word "bride" on line 3, should be changed to "bridge."

In further regards to claim 1, the word "programed" on line 8, should be changed to "programmed."

In regards to claim 3, the word "bridges" on line 2, should be changed to "bridge."

In regards to claim 7, the words "at" and "the" should be erased on line 5.

In regards to claim 13, the word "programming" on line 2 should be changed to "programming."

In regards to claim 14, the word "fame" on line 3, should be changed to "frame."

In regards to claim 28, the word "programing" on line 2, should be changed to "programming."

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4-13 of copending Application No. 09866336. Although the conflicting claims are not identical, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In regards to claim 1 of this application the limitation of a communication bridge having a serial interface to provide a serial communication link, when connected to the serial interface of a second communication bridge between a first device layer such as an ATM layer and a second device layer such as a physical (PHY) layer is obvious over claim 1 of the co-pending application 09866336 wherein a communication system comprising: a first bridge, and a second bridge serially connected to the first bridge, to provide a serial communication interface between a first device layer such as an ATM layer and a second device layer such as a physical (PHY) layer is claimed. The communication bridge having a serial interface to provide a serial communication link when connected to the serial interface of a second communication bridge between a first device layer such as the ATM layer and a second layer such as physical (PHY) layer is obvious over a communication system comprising a first bridge and a second bridge serially connected to the first bridge, to provide a serial communication interface between the two layers. It would have been obvious to use the term “communications

bridge" in this application instead of the term "first bridge" in the co-pending application 09866336. Furthermore, it would have been obvious to add the terms "programmed for a first mode of operation" and "programmed for a second mode of operation" because in both claims, the device layers are being programmed.

In regards to claim 2 of this application wherein the second mode of operation includes a means for communicating with a plurality of second device layers corresponds to claim 4 of the co-pending application.

In regards to claim 3 of this application wherein the communication bridge includes a down bridge direction and an up bridge direction, the communication bridges include an assembler means for converting an established protocol cell to a transport container for transmitting over the serial communication link corresponds claim 5 of the co-pending application.

In regards to claim 4 of this application wherein the communication bridge includes a means for detection of back pressure code operatively connected to the assembler means and the assembler means includes a means for embedding the back pressure detection into the transport container corresponds to claim 6 of the co-pending application.

In regards to claim 5 of this application wherein the communication bridge comprises a means for generating an error code on at least a first portion of the transport container code operatively connected to the assembler means and the assembler means assembles the error code into the transport container corresponds to claim 7 of the co-pending application.

In regards to claim 6 of this application wherein the communication bridge comprises a means for generating an alarm and signal code operatively connected to the assembler means and the assembler means includes a means for embedding the alarm and signaling code into the transport container corresponds to claim 8 of the co-pending application.

In regards to claim 7, wherein the communication bridge includes a parity generator and checker for generating a parity code, the parity generator and checker being operatively connected to the serial communication link and to the assembler means and the assembler means includes a means for embedding the parity code into the transport container corresponds to claim 9 of the co-pending application.

In regards to claim 8, wherein the communication bridge includes a down bridge direction and an up bridge direction and wherein the communication bridge in the up bridge direction includes a disassembler means for converting a transport container to the establisher protocol cell for transmitting over the established protocol interface corresponds to claim 10 of the co-pending application.

In regards to claim 9, wherein the transport container includes an embedded back pressure indication and the disassembler means includes a means for extracting the back pressure indication corresponds to claim 11 of the co-pending application.

In regards to claim 10 wherein the transport container further includes an error code and the communication bridge includes a means for checking the error code corresponds to claim 12. It is noted that the dissembling and checking features perform similar functions.

In regards to claim 11 wherein the container further includes an embedded alarm and signal code and the dissembler means includes a means for extracting the embedding alarm and signal code for the transport container corresponds to claim 13 of the co-pending application.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Heikkinen et al. (U.S. Patent 6621794).

In regards to claim 1, Heikkinen teaches a method for determining the time difference between physical IMA (ATM) links. The ATM layer is coupled to a PHY layer device, which is coupled to another PHY layer device via physical link (see figure 1, ATM layer 110, PHY layer devices 122 and 136 and physical link 114). The first device layer has an established ATM protocol and cells are passed transparently through the ATM layer, and the PHY layer devices are transparent to the ATM layer (see column 5, lines 35-40). This disclosure anticipates a communication bridge having a serial

interface to provide a serial communication link, when connected to the serial interface of a second communication bridge, between a first device layer such as an asynchronous transfer mode (ATM) layer and a second device layer such as a physical (PHY) layer; the communication bridge further includes a programmable device interface capable of being connected according to an established protocol to the first device layer when programmed for a first mode of operation, when in the first mode of operation the communication bridge is transparent to the first device layer and programmed to represents the second device layer to the first device layer; and when programmed for a second mode of operation the communication bridge is capable of being connected according to the established protocol to the second device layer, in the second mode of operation the communication bridge is transparent to the second device layer and represents the first device layer.

In regards to claim 2, Heikkinen discloses in figure 2 a layer reference model 200, which includes the PHY layer 212. The layer reference model also includes user plane functions 220, the layer management functions 222 and the plane management functions 224 (see figure 2 and column 5, lines 9-14). This disclosure anticipates the second mode of operation including a means for communicating with a plurality of second device layers.

In regards to claims 3 and 8, Heikkinen discloses in figure 3 a group of links 322 made available to the IMA and handles differential delay and actions to be taken when links are added or dropped or when the links are failed/restored. In the receive direction, the IMA 320 performs differential delay compensation and recombines the

cells into the original cell stream with the original inter-cell spacing (see figure 3 and column 5, lines 31-40). This disclosure anticipates anticipates the communication bridge including a down bridge direction and an up bridge direction and in the down bridge direction, the communications bridge includes and assembler and diassembler means for converting an established protocol cell to a transport container for transmitting over the serial communication link.

In regards to claims 4 and 9, Heikkinen teaches avoiding overflow and using bit stuffing control date in figure 4, stuffing control 460 (see also column 5, lines 61-63 and figure 5, stuffing control 590, 592 and 594 and column 6, lines 2-3). This disclosure anticipates a means for detection of backpressure code operatively connected to the assembler means and the assembler means includes a means for embedding the backpressure detection into the transport container. , lines 2-3).

In regards to claims 5, 6, 10 and 11 Heikkinen teaches assembling error code and alarm code into the transport containers (see layer management function 222 in figure 2). This disclosure anticipates the communication bridge comprises a means for generating an error code on at least a first portion of the transport container code operatively connected to the assembler means and the assembler means assembles the error code into the transport container, the communication bridge comprises a means for generating an alarm and signal code operatively connected to the assembler means and the assembler means includes a means for embedding the alarm and signaling code into the transport container and an error code and the communication bridge including a means for checking the error code as well as the transport container

further including an embedded alarm and signal code and the disassembler means for extracting the embedded alarm and signal code from the transport container.

In regards to claim 7, Heikkinen teaches HEC parity code information in the layer management function 22 in figure 2. This disclosure anticipates the communication bridge includes a parity generator and checker for generating a parity code, the parity generator and checker being operatively connected to the serial communication link and to the assembler means and the assembler means includes a means for embedding the parity code into the transport container.

6. Claims 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Rich (U.S. Patent 6452927 B1).

In regards to claim 13, a communication the extender circuit 206 that provides a serial communication interface between an ATM layer and a physical layer bridge comprising and the serial interface circuits 314 and 316 anticipate an established protocol interface and a communications bridge. (See figure 2, extender circuit 206, ATM layer 202 and PHY layer 204 and figure 3, serial interface circuits 314, 316; also see column 7, lines 13-15; column 9 lines 1-4 and lines 22-23).

In further regards to claim 13, the serializes and deserialzers in figure 3 anticipate a means for programming the established protocol interface to first mode of operation (serializing/deserialzing from ATM to PHY) and a second mode of operation (serializing/deserialzing from PHY to ATM), the established protocol interface includes a means for transferring established protocol cells between the communication bridge and the first device layers when in the first mode of operation and for transferring the

established protocol cells between the communication bridge and the second device layers when in the second mode of operation. As evident form figure 3, data can be serialized in the serializer 330 in the serial interface circuit 314 and sent via serial link 320 to the deserialzer 336 in the PHY layer and data can be serialized in the serializer 340 in the serial interface circuit 316 and sent via serial link 322 to the deserialzer 334 in the ATM layer.

In further regards to claim 13, the serializers 330 and 340 and serial links 320 and 322 anticipate a serial interface.

In further regards to claim 13, the serial links 322 and 320 anticipate the up and down bridges respectively.

In further regards to claim 13, the serialzer 330, the serial link 320 and deserialzer 336 together anticipate the down bridge direction having a means for converting the established protocol to a transport container, the means being operatively connected to the established protocol interface.

In further regards to claim 13, the two-way link between the deserialzer 336 and serializer 340 and the serial link 322 together anticipate a means for applying the transport container to the serial interface, the means for applying being operatively connected to the means for converting and to the serial interface.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich (U.S. Patent 6452927 B1) as applied to claim 13 above, and further in view of Livermore et al. (US Patent 6542511 B1).

In regards to claim 14, Rich teaches all the limitations of claim 13 as stated above. Rich fails to teach wherein the means for applying includes a means for arranging a predefined number of transport containers into a frame.

Livermore teaches the above-mentioned limitation. Livermore teaches a capacity-allocation algorithm (see column 10 lines 38-48 and figure 15). In the example in figure 15, K is the number of containers per frame and L is the number of bits per container; the K containers and the L number of bits per container.

Therefore, it would been obvious to one of ordinary skill in the art at the time the invention was made to combine the capacity allocation algorithm of Livermore with the means for applying disclosed by Rich. The proper motivation comes from Livermore where it is stated, "a flexible programmable transport simplifies network management and extends the network capacity and end-to-end capacity allocation" (see column 3, lines 57-61).

In regards to clam 19, Rich teaches all the limitations of claim 13 as stated above. Rich fails to teach wherein the means for applying includes a means arranging a plurality of transport containers into a frame of N blocks wherein N is a positive number with each block including M transport containers where M is a positive number

and each transport container includes at least one control byte, the means for applying includes a means for sequentially applying a first transport container of a first block through a last transport container of a last block to the serial interface.

Livermore teaches the above-mentioned limitation. Livermore teaches a capacity-allocation algorithm (see column 10 lines 38-48 and figure 15). In the example in figure 15, K is the number of containers per frame and L is the number of bits per container; the K containers and the L number of bits per container. Furthermore, figure 5 shows a series of containers, each of which contains a header, trailer and payload data (see figure 5 and column 6, lines 25-51). The header and the tail have a fixed number of data units, which contain predetermined signal patterns to identify themselves. The before mentioned structure of the transport container is obvious over the control byte and the series of containers are obvious over the applying a first transport container of first block through a last transport container.

Therefore, it would been obvious to one of ordinary skill in the art at the time the invention was made to combine the capacity allocation algorithm of Livermore with the communications bridge disclosed by Rich. The proper motivation comes from Livermore where it is stated, "a flexible programmable transport simplifies network management and extends the network capacity and end-to-end capacity allocation" (see column 3, lines 57-61).

9. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich (U.S. Patent 6452927 B1) as applied to claim 13 above, in view of Livermore

et al. (US Patent 6542511 B1).and further in view of Heikkinen et al. (U.S. Patent 6621794).

In regards to claim 15, Rich and Livermore disclose all the limitations of claims 13 and 14 as stated above. Neither Rich nor Livermore disclose the communications bridge further comprising: a means fro generating an error code of at least a first portion of each transport container; and the means for converting includes an assembly means for assembling the error code into the transport container having the first portion on which the error code was generated.

Heikkinen teaches the above-mentioned limitation. Heikkinen teaches assembling error code and alarm code into the transport containers (see layer management function 222 in figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Rich and Livermore with that of Heikkinen. The proper motivation comes from Livermore where it is stated, "a flexible programmable transport simplifies network management and extends the network capacity and end-to-end capacity allocation" (see column 3, lines 57-61).

In regards to claim 17, Rich and Livermore disclose all the limitations of claims 13 and 14 as stated above. Neither Rich nor Livermore disclose the communications bridge further including a means for generating a parity code on the frame; and an assembly means for embedding the parity code into a predefined transport container.

Heikkinen teaches the above-mentioned limitation. Heikkinen teaches HEC parity code information in the layer management function 22 in figure 2. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Rich and Livermore with that of Heikkinen. The proper motivation comes from Livermore where it is stated, "a flexible programmable transport simplifies network management and extends the network capacity and end-to-end capacity allocation" (see column 3, lines 57-61).

10. Claims 28, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich (US Patent 6452927) in view of Bottorff et al. (US Publication 2001/0014104 A1).

In regards to claim 28, Rich teaches an established protocol interface and a communications bridge. Rich discloses an extender circuit 206 that provides a serial communication interface between an ATM layer and a physical layer; furthermore, Rich also discloses the serial interface circuits 314 and 316 (See figure 2, extender circuit 206, ATM layer 202 and PHY layer 204 and figure 3, serial interface circuits 314, 316; also see column 7, lines 13-15; column 9 lines 1-4 and lines 22-23).

In further regards to claim 28, Rich teaches a means for programming the established protocol interface to first mode of operation (serializing/deserialzing from ATM to PHY; the serializes and deserialzers in figure 3) and a second mode of operation (serializing/deserialzing from PHY to ATM; the serializes and deserialzers in figure 3).

In further regards to claim 28, Rich also teaches the established protocol interface includes a means for transferring established protocol cells between the communication bridge and the first device layers when in the first mode of operation and

for transferring the established protocol cells between the communication bridge and the second device layers when in the second mode of operation. As evident form figure 3, data can be serialized in the serializer 330 in the serial interface circuit 314 and sent via serial link 320 to the deserialzer 336 in the PHY layer and data can be serialized in the serializer 340 in the serial interface circuit 316 and sent via serial link 322 to the deserialzer 334 in the ATM layer.

In further regards to claim 28, Rich also teaches a serial interface. The serializers 330 and 340 and serial links 320 and 322, constitute a serial interface.

In further regards to claim 28, Rich also teaches the up and down bridges. The serial links 322 and 320 constitute the up and down bridges respectively.

In further regards to claim 28, Rich also teaches a means for receiving a frame of a plurality of transport containers including a means for marking a preselected transport container of the frame. Figure 9 illustrates a transmission of cell data from the PHY layer to an ATM layer where the serialzer 912, receives an enable flag from the control logic 914. This disclosure constitutes the above-mentioned apparatus (see figure 9, serializer 912 and control logic 914 and column 16, lines 20-32).

In further regards to claim 28, Rich also teaches the up bridge direction having a means for converting the established protocol to a transport container, the means being operatively connected to the established protocol interface. The serialzer 340, the serial link 322 and deserialzer 334 together constitute the above-mentioned apparatus.

In further regards to claim 28, Rich also teaches a means for applying the established protocol to the serial interface, the means for applying being operatively

connected to the means for converting and to the established protocol interface. The between the deserialzer 334 and serializer 340 and the serial link 322 together constitute the above-mentioned apparatus.

Rich fails to disclose a means for checking each transport container for an error code. Bottorff teaches the above-mentioned limitation. Bottorff discloses in figures 5 and 6 an operation of the PHY in LAN configuration of the network. Figure 5 illustrates a synchronous container usable for transportation of payload data. The preamble in figure 6, includes a Header Error Code (HEC) contained in the first portion of a packet in the synchronization container 60 (see figures 5 and 6, container 60 and preamble and paragraphs 43 and 45 on pages 4 and 5).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine the disclosure of Rich with the synchronous container disclosed by Bottorff. The proper motivation would be to enhance reliability and efficiency for communicating data between the physical and ATM layers over extended distances as supported by the disclosure of Rich.

In regards to claim 32, Rich fails to disclose wherein each transport container includes a header, an error code field, and a payload field and the means for receiving includes a means for checking an error code of at least a first portion of each transport container. Bottorff discloses in figures 5 and 6 an operation of the PHY in LAN configuration of the network. Figure 5 illustrates a synchronous container usable for transportation of payload data. The preamble in figure 6 includes a Header Error Code (HEC) contained in the first portion of a packet in the synchronization container 60 and

a data field 70 (see figures 5 and 6, container 60 and preamble and paragraphs 43 and 45 on pages 4 and 5).

11. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rich (US Patent 6452927).

In regard to claim 33, Rich discloses a means for detecting a marking in a predefined transport container of the frame of transport container. Figure 9 illustrates a transmission of cell data from the PHY layer to an ATM layer where the serialzer 912, receives an enable flag from the control logic 914 (see figure 9, serializer 912 and control logic 914 and column 16, lines 20-32).

12. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich (U.S. Patent 6452927 B1) in view of Bottorff et al. (US Publication 2001/0014104 A1), further in view of Livermore et al. (US Patent 6542511 B1).

In regards to claim 31, Rich and Bottorff teach all the limitations of claim 28 as stated above. Rich fails to teach wherein the means for receiving the transport container includes a means for receiving a frame having a predefined number of transport containers.

Livermore teaches the above-mentioned limitation. Livermore teaches a capacity-allocation algorithm (see column 10 lines 38-48 and figure 15). In the example in figure 15, K is the number of containers per frame and L is the number of bits per container; the K containers and the L number of bits per container.

Therefore, it would been obvious to one of ordinary skill in the art at the time the invention was made to combine the capacity allocation algorithm of Livermore with the

means for receiving disclosed by Rich. The proper motivation comes from Livermore where it is stated, "a flexible programmable transport simplifies network management and extends the network capacity and end-to-end capacity allocation" (see column 3, lines 57-61).

In regards to claim 35, Rich and Bottorff teach all the limitations of claim 28 as stated above. Either Rich or Bottorff fail to teach, a frame being composed of N blocks of transport containers where N is a positive number with each block including M transport containers where M is a positive number and each transport container includes at least one control byte, the means for receiving the transport containers includes a means for sequentially receiving a first transport container of a first block through a last transport container of a last block.

Livermore teaches the above-mentioned limitation. Livermore teaches a capacity-allocation algorithm (see column 10 lines 38-48 and figure 15). In the example in figure 15, K is the number of containers per frame and L is the number of bits per container; the K containers and the L number of bits per container are obvious over the N blocks and M containers. Furthermore, figure 5 shows a series of containers, each of which contains a header, trailer and payload data (see figure 5 and column 6, lines 25-51). The header and the tail have a fixed number of data units, which contain predetermined signal patterns to identify themselves. The before mentioned structure of the transport container is obvious over the control byte and the series of containers are obvious over the applying a first transport container of first block through a last transport container.

Therefore, it would been obvious to one of ordinary skill in the art at the time the invention was made to combine the capacity allocation algorithm of Livermore with the disclosures of Rich and Bottorff respectively. The proper motivation comes from Livermore where it is stated, "a flexible programmable transport simplifies network management and extends the network capacity and end-to-end capacity allocation" (see column 3, lines 57-61).

Allowable Subject Matter

13. Claims12, 18, 20-27, 29-30, 34, 36-42 and 43-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPP 9/8/05

Jay P. Patel
Assistant Examiner
Art Unit 2666

Seema S. Rao 9/19/05

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600